A.I.A.File FRAME MODERN **ARCHITECTS**

ARCHITECTS

CONTRACTORS

MILLWORK DEALERS

C. C. BANHOLZER

UNIQUE BALANCE CO., INC 296 East 134th Street

What Is This Book?

HEN assembling the material for this book our foremost thought was to give the architect, contractor, and mill work dealer such designs and details of frames as are not found in the average plan book. For this reason we have omitted practically all variations of regular every day stock frames. We know the architects, contractors and mill work dealers have plenty of frame details of the average window.

The various frame details and types of construction shown in this book should be of considerable value and we feel will inspire an architect, builder or mill work dealer with more new and practical ideas made possible with the Unique Sash Balance.

We especially wish to call your attention to a few of many possibilities the Unique Sash Balance affords, such as: narrow mullions, narrow trim, weathertight construction by insulation tight to the frame jambs, narrow dormers as the weight box is eliminated on each side of the frame, maximum light, more wall space, greater load bearing piers between frames, and freedom of architectural design. Due to the simplicity of the Unique frame it can often be made cheaper for a special condition or special frame than a regular stock pulley frame.

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UNIQUE Sash Balances are used by a large number of nationally known frame, sash and millwork manufacturers in combination with their units of frame and sash. Names of these will be furnished upon request.

There are also a number of steel window manufacturers using Unique Sash Balances with their double-hung windows.

A few of the thousands of architects who have used Unique Sash Balances.

ABRAMSON, LOUIS A., New York City ABRAHAMS, DAVID J., Boston, Mass. ADAMS & PRENTICE, New York, N. Y. ALMIROLY, RANDOLPH H., New York, N. Y. ANDREWS, JONES, BISCOE & WHITMORE ANDREWS. JONES, BISCOE & WHITMORE Boston, Mass.
ASHEIN, LEONARD, Bridgeport, Conn.
ATKINSON, H. STANLEY, Philadelphia, Penn.
BAGGE & ABRAMS, New York City
BAILEY, JOS. W., Greenwich, Conn. BALLENTINE, JOHN KNOX San Francisco, Calif. BAMWELL, ROY W., Philadelphia, Penn. BAMWELL, ROY W., Philadelphia, Penn.
BARTHMAIER, EUGENE V.
Philadelphia, Penn.
BAUM, DWIGHT J., New York City
BARNARD, JOHN, Boston, Mass.
BEEKER, SAMPSON V., Bronx, N. Y.
BELL, C. C., Cranford, N. J.
BEATLY, J. BEN, Elizabeth, N. J.
BERNHARDT, MAX, Philadelphia, Penn.
BIRNBAUM & BRAUERMAN, New York City
RISSELL, ERANK H. New York City BISSELL, FRANK H., New York City BOAK & PARIS, New York, N. Y. BOWDEN, REUBEN HENRI, New York, N. Y. BRITTON, JAMES A., Greenfield, Mass. BREED, F. NELSON, New York, N. Y. BROWN & WHITESIDE, Wilmington, Del. BRUBAKER. L. A., Maplewood, N. J.
BRUMBAUGH, G. EDWIN, Philadelphia, Penn.
CALDWELL, EDWARD B., Bridgeport, Conn.
CAMLET. THOMAS, Clifton, N. J.
CANDELA, ROSARIO, New York City
CARLSON, WALTER, Wilmington, Del.
CASTOR, HORACE W., Philadelphia, Penn.
CHEEL H. W. H. B. V. V. M. L. CHEEL, H. W., Ho-Ho-Kus, N. J. CHERRY & MATZ, New York City CLARK, CAMERON, New York, N. Y. CLAS & CLAS, Inc., Milwaukee, Wisconsin CLAS & CLAS, Inc., Milwaukee, Wisconsin CLIFFORD, WALTER C., San Francisco, Calif. CLYDE, JOS. W.. Mt. Vernon, N. Y. CONARROE, J. LINERD, Philadelphia, Penn. CONSTABLE, ARNOLD. San Francisco, Cal. COOLIDGE, SHEPLEY, BULFINCH & ABBOT, Boston, Mass. CRAM & PARRATTEE, Norwalk, Conn. DAGIT BROS., Philadelphia, Penn. DALZELL, KENNETH W., East Orange, N. J. DALLELL, CARDINER A. San Francisco, Calif. DALZELL, KENNETH W., East Orange, N. J.
DAILEY, GARDINER A., San Francisco, Calif.
(Designed Brazil Building S. F. World's Fair,
using Unique on double hung 2'6"x10"0".)

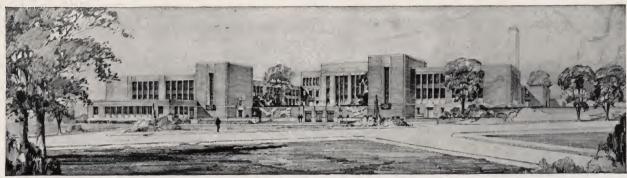
DE ARMOND, ASHMEAD & BICKLEY
Philadelphia, Penn.

DE PACE & JUSTER, New York, N. Y.
DERBY, BARNES & CHAMPNEY, Boston, Mass.
DEWEY, CHAS. A., Pleasantville, N. Y.
DI RIENZO, EMILIO, Mt. Vernon, N. Y.
DONOHUE, THOMAS M., Wilmington, Del.
DIRLAM, ARLAND A., Malden, Mass. DONOHUE, THOMAS M., Wilmington, Del. DIRLAM, ARLAND A., Malden, Mass. EAMES, EDWARD A., San Francisco, Cal. EARLEY. THOMAS J., Philadelphia, Penn. EISENBERG, S. S., Boston, Mass. ELY, SETH, Jr., Lake Mohawk, N. J. ESCHENBACH, BENSON, Scarsdale, N. Y. EVANS. MOORE & WOODBRIDGE, New York City. EVANS. MOORE & WOODBRIDGE, New York City EVANS, RANDOLPH. New York, N. Y. EVANS. SANFORD, New York City EXERJIAN, MANOUG, New York, N. Y. FARR. ALBERT, San Francisco, Calif. FLATT, RAYMOND B., Bloomfield, N. J. FLATI, RATMOND B., Bloomfeld, N. J. FOSS & COMPANY, Fergus Falls, Minn. FRITZ, HERMAN, Passaic, N. J. FROST, F. G., New York, N. Y. GRIFFITH, HOWARD A., Jr., Sheffield, Alabama GUTTERSON, HENRY M., San Francisco, Calif. HALBERT, WM. C., New Rochelle, N. Y. HALL & PAUFVE, Bronxville, N. Y. HAHN, FRANK E., Philadelphia, Penn. HANISCH, MAX, Marinette, Wisconsin

HEIMAN, SAM, San Francisco, Calif. HENDY, L. J., CAPITAL CO., B. OF A. San Francisco, Calif. HERTZKA & KNOWLES, San Francisco, Calif. HERBST & KUENZLI, Milwaukee, Wisconsin HOHAUSER, WM., New York City HUBERT, DERRICK, Menominee, Michigan HULSLANDER. JOHN D., Worcester, Mass. HUNTER-McDONNELL, New York, N. Y. IDELL, GEORGE S., Philadelphia, Penn. IVES, PHILIP. New York, N. Y. JACKSON, ROBERTSON & ADAMS Providence, R. I.
JELINEK, SIDNEY, Philadelphia, Penn.
JOHNSTON, ELLSWORTH, San Francisco, Calif.
JOHANSON, HENRY W., Roslyn, N. J. JOHNSON & PORTER, New York City JOSSIER, P. J., Palisades Park, N. J. KELLENYI, ALEX, Eatonville, N. J. KERNS, RICHARD A., Philadelphia, Penn. KERNS, RICHARD A., Philadelphia, Penn KIESSLING, CALVIN, New Canaan, Conn. KILBORN, ROBT. C., Danbury, Conn. KIMBALL & HUSTED, New York City KIRBY, WALTER B., New Canaan, Conn. KLEEMAN, E. H., Newark, N. J. KLINE, EDW., Munsey Park, N. Y. KLUEPPELBERG, A., New York City KNEEDLER & ZANTZINGER Philadelphia, Penn. KOERNER, HARRY, Bridgeport. Conn. KRIMMEL, EDMUND, Philadelphia, Penn. KROMFELD, FRANK, Mt. Vernon, N. Y.
KRONFELD, FRANK, Mt. Vernon, N. Y.
KRUSE, ALBERT, Wilmington, Del.
LANGE, WALTER, Milwaukee, Wisconsin
LAW, LAW & POTTER, Madison, Wisconsin
LEE, WM. H., Philadelphia, Penn.
LESCAZE, WM., New York, N. Y. LIGHTNER, SAMUEL; HYMAN & A APPLETON, San Francisco, Calif. LINDLEY, CHAS., San Francisco, Calif. LITTLE & RUSSELL, Boston, Mass. LOEB, LAWRENCE M., White Plains, N. Y. LONGSTREET, J. RUSSEL, Philadelphia, Penn. LUDWIG, JAMES G., Philadelphia, Penn. LYON, LELAND HUBBELL New Rochelle, N. Y. MARGOLIS, JOSEPH, Philadelphia, Penn. MARTIN & JEFERS, Wilmington, Del. MAGINNIS & WALSH, Boston, Mass. MARX, RALPH, New York, N. Y.
MASSENA & DU PONT, Wilmington, Del. MASSENA & DU PONT, Wilmington, Del.
MASTEN & HURD (Childrens Hospital)
San Francisco, Calif.
MAYER, ALBERT, New York City
MacCOLLIN, E. N., New Rochelle, N. Y.
McCAULEY, CHAS. H., Birmingham, Alabama
McGOODWIN, ROBERT RODES
Philadelphia, Penn. Philadelphia, Penn.
McMURRAY, E. A. & SCHMIDLIN Union, N. J. MATZNER, LEO., Plainfield, N. J. MATSON, NAT O., White Plains, N. Y. MECASKEY, RICHARD W., Philadelphia, Penn. MITCHELL, JAMES H., San Francisco, Calif. MOORE & HUTCHINS, New York, N. Y. MONAHAN & MEIKLE, Pawtucket, R. I. MOULTON, FRANK S., Madison, Wisconsin MUCKLOW, EVANS S., Philadelphia, Penn. NECARSULMER, EDW., New York City NICHOLS, LESLIE, Palo Alto, Calif. NICHOLS, PHILLIPS BROOKS, White Plains, N. Y. NORTON, KENNETH B., New York City NUNN, STAYTON & McGINTY, Houston, Texas OAKLEY & SONS, Elizabeth, N. J. OTTO, KARL F., Philadelphia, Penn. PAREIS, WM. W., Summit, N. J. PARKER, HARRY, Philadelphia, Penn.

PECK, ROY O., Summit, N. J.
PERRY, SHAW & HEPBURN, Boston, Mass.
PETERSON, E. GUNNAR, Falmouth, Mass.
PELHAM, GEO. FRED. Jr., New York, N. Y.
PERRY, WARREN C., San Francisco, Calif.
PEUGH, W.D., San Francisco, Calif.
PHILLIPS, STANWOOD, New York City
POTTER, WM. WOODBURN, Philadelphia, Penn.
PROVOOST, WM., Stamford, Conn.
POKRAS & LYONS, Bridgeport, Conn.
PURVES, COPE & STEWART PURVES, COPE & STEWART Philadelphia, Penn.
PUTNAM & COX, Boston, Mass.
RAYMOND, ELEANOR, Boston, Mass. READ, EDWARD SEARS, Boston, Mass.
RESNYK, PHILIP, New York, N. Y.
RICKARD, GREVILLE, New York, N. Y.
RILEY, WILLIAM A., Boston, Mass.
RILEY & SIBERZ, Madison, Wisconsin
SALOMONSKY, VERNA COOK New York, N. Y. SAVERY, SHEETZ & GILMOUR Philadelphia, Penn. Philadelphia, Penn.
SCANNELL, R. H., Bronxville, N. Y.
SCHOEN, WM., New York, N. Y.
SCHOEPPE, EDWARD, Philadelphia, Penn.
SCHORNMAKER, A. H., Chatham, N. J.
SERRANO, RALPH V., Aldan, Penn.
SCHROEPER, ALBERT, San Francisco, Calif.
SHARPE, ED MUNSON, San Francisco, Calif.
SILVERMAN & LEVY, Philadelphia, Penn.
SINON, GRANT M., Philadelphia, Penn.
SINKLER, J. P. B., Philadelphia, Penn.
SNOW RAMOND C., Washington, D. C. SIMON, GRANT M., Philadelphia, Penn.
SINKLER, J. P. B., Philadelphia, Penn.
SNOW, RAMOND C., Washington, D. C.
SNOW, RICHARD B., Kew Gardens, N. Y.
SMITH, O. B., Springfield, N. J.
SHELDON & SON, Providence, R. I.
SMITH, JACK B., Birmingham, Alabama
SMITH & WALKER, Boston, Mass.
SMITH, WILTON (new), San Francisco, Calif.
SPENCER, BLANCHARD & MAHER
San Francisco, Calif.
STEIN, CLARENCE S., New York, N. Y.
STERN & PEYSER, Mt. Vernon, N. Y.
STETLER, JESSIE L., Lansdowne, Penn.
STOWELL, RAYMOND M., Newton, Mass.
STRINGHAM, ROLAND I., San Francisco, Calif.
STROTHOFF, CHAS. F., San Francisco, Calif.
STROTHOFF, CHAS. F., San Francisco, Calif.
SULLIVAN, MATTHEW, Boston, Mass.
SUNDERLAND, W. W., Danbury, Conn.
TARPLEY, DONALD G., Darien, Conn.
THALHEINER & WEITZ, Philadelphia, Penn.
THORN, LOUIS, Yonkers, N. Y.
THORNLEY, JOHN, White Plains, N. Y.
TILDEN & PEPPER, Philadelphia, Penn.
TOOKER & MARSH, New York, N. Y. TOOKER & MARSH, New York, N. Y. TRAVIS, GEO. W. (Rolkin Apartments) San Francisco, Calif. TREVENEN, HAROLD, Plainfield, N. J. TUBBY, WM. B., New York, N. Y.
TURCOT, U. G., Larchmont, N. Y.
TURNER, EDGAR S., Tuckahoe, N. Y.
WALKER, HARRY L., New York, N. Y.
VICKERS, ARTHUR, White Plains, N. Y.
VILLANUEVA, MARCEL, Orange, N. J.
VOORHEES. GMELIN & WALKER
New York, N. Y.
WALLACE, E. G., Darien, Conn.
WALLACE & WARNER, Philadelphia, Penn.
WARD, J. FRANCIS, San Francisco, Calif.
WARREN, KNIGHT & DAVIS
Birmingham, Alabama TUBBY, WM. B., New York, N. Y. Birmingham, Alabama WAY, CHARLES H., Boston, Mass. WEBER, ALBERT F., Linden, N. J. WHILLIDIN, D. O., Birmingham, Alabama WILLING, SIMS & TALBUTT Philadelphia, Penn. WILLIS, CHARLES M., Lexington, Mass. WILSON, E. ALLEN, Lansdowne, Penn.

A Few of Many Thousands of Buildings of Every Description



Architect: Davis and Dunlap

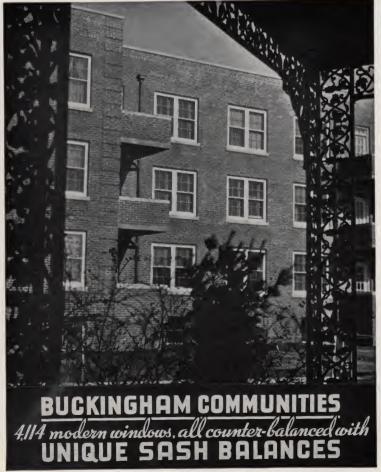
Builder: Barclay White Co.

BALA CYNWYD, JUNIOR HIGH SCHOOL, LOWER MERION TOWNSHIP, PENNSYLVANIA

Note the exceptional size of the windows.



APARTMENT HOTEL IN MIAMI BEACH, FLA.
Architect, Henry Hobauser
O'Neill-Orr Construction Company, Contractor



Above is part of a large community which is being visited by many builders and high government officials since it is considered the outstanding home community development in the country. Over 4,000 sets of Unique Sash Balances have already been used and with its completion it will require over 30,000 sets.



POPHAM HALL APARTMENTS
45 Popham Road, Scarsdale, N. Y.
Architect, George Fred Pelham, Jr.
Builder, Louis Cowan



APARTMENT, 965 FIFTH AVENUE, NEW YORK CITY—in one of the most exclusive residential sections of New York City—Certainly a tribute to the quality of the Unique Balance.

Associated Architects: Russell M. Boak and Irving Margon

Builder: Kensington Estates, Inc.

Using Unique Sash Balances and Unique Weatherstrip



Builders, R. E. Mulcahy & Sons
Architect, R. E. Mulcahy Shore Hills. New Jersey



CRANE - BERKLEY RESIDENCE
Scarsdale, N. Y.
Builder, A. Barberesi & Sons
Architect, Verna Cook Salomonsky



HUBBARD RESIDENCE Architect, David J. Abrahams, Boston, Mass. Contractor, S. G. Sweetser Co., Dennis Port, Mass.



Mountain Lake, N. J. HIGH SCHOOL Architects, Tooker & Marsh, N. Y. C.



RESIDENCE J. M. STRANGE
Country Club Gardens, Birmingham, Ala.

James L. Gatlin, Architect Shepherd-Sloss, Contractor



Twin Homes in 400 Block E. Durham St., Phila., Pa. Builder, William Mark



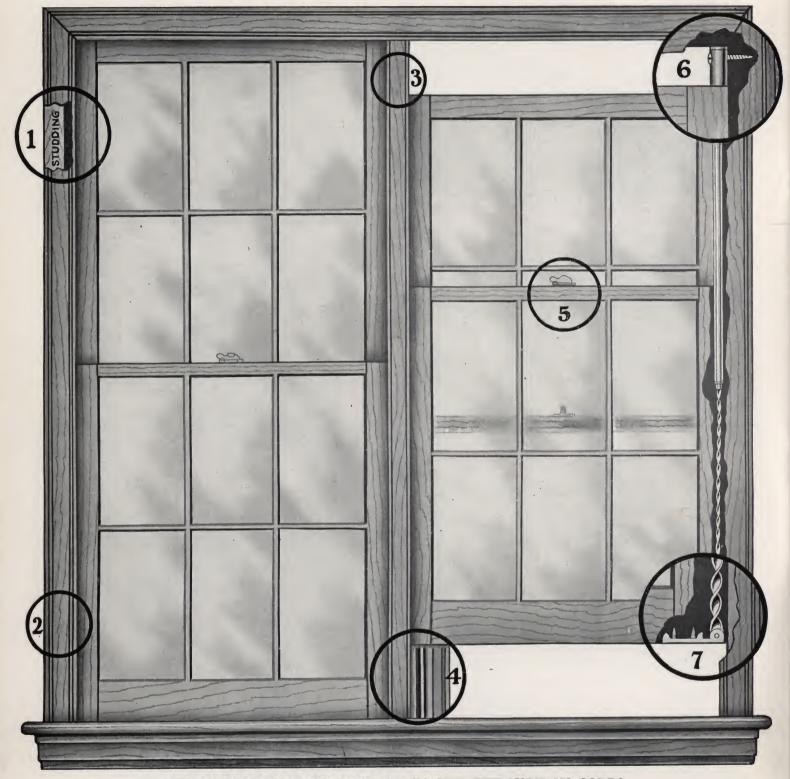
Bayside, L. I. Bayside HILLS DEVELOPMENT

Builders, Gross Morson



152 EAST 94th STREET BUILDING, NEW YORK
Architect, Book & Parts
Builder, Sam Minskoff

A MODERN WINDOW



NO PULLEY HOLES FOR COLD AIR TO SEEP THROUGH. NO CORDS TO BREAK, NO WEIGHTS, NO POCKETS OR WEIGHT BOXES.

- Studding or brick set tight against frame jamb assuring solid construction and maximum weather-tightness.
- 2. Unique Sash Balances permit the use of narrow trim at a substantial saving and since there are no weight boxes, same may be securely nailed to frame and studding.
- 3. Narrow mullions 1-1/2" wide or 2" if desired.
- 4. Unique Weatherstrips eliminate any air leakage around sash.
- Perfectly balanced sash at every position. No friction necessary to hold sash in place.
- 6. Here is shown how the Unique Sash Balance is fastened to jamb at head of frame. Also how balance sets inside of sash.
- 7. Here is shown how the Unique Sash Balance adjuster is fastened underneath sash rail.
 - Balances may be installed or removed after sash has been put in place and window completely trimmed.

A FEW OF THE MANY IMPORTANT FEATURES MADE POSSIBLE BY THE USE OF UNIQUE SASH BALANCES

A Pre-fit Window Unit

It is now possible, if desired, to do the following work in a millwork shop before frames are sent to a job. Install weatherstrip if same is wanted, install balances, fit and hang sash. See pages 32 and 33 for Unique Weatherstrip.

Insulation of Windows and Walls Around Window

The elimination of weight boxes made possible by the use of UNIQUE SASH BALANCES allows insulation to be packed tight against frame jamb resulting in better and more weathertight construction.

A Trouble Free Window

The Unique Sash Balance assures the home owner of a trouble free window. There are no chains or cords to break, weights to stick, or pulleys to wear out, which in the past has resulted in the spoiling of paint, the destruction of window trim, and the general nuisance connected with such repair work.

Added Sales Value to a Building

Sell your building quicker by pointing out to your buyer the features of a window equipped with Unique Sash Balances such as weathertightness, perfect insulation, modern narrow trim and narrow mullions. The wide-awake seller will show a window usually in the garage with the studding and insulation features exposed to illustrate these features.

Cost Comparison

Do not be fooled by some dealers. Although practically all lumber and millwork dealers are fair and satisfied with a reasonable profit on Unique Balances, some will try to take advantage of their customers by adding an exorbitant profit to their cost. UNIQUE SASH BALANCES should cost no more than weight and cord construction. In most cases the ultimate cost is less. The Unique Frame which is a plain jamb frame, costs considerably less than a regular pulley frame and this saving and the saving in the cost of the weights and cords easily offsets the cost of the balance. If a narrow trim is used, which is customary with UNIQUE SASH BALANCES, instead of wide trim, the buyer can count on a saving of from \$25.00 upward per average building.

What is a Unique Frame?

The Unique frame is a regular stock frame, head and sill being the same as any pulley frame. Side jambs however are plain since there are no pulleys, pockets, or weight boxes. The Unique Sash Balance is so universally used that practically every manufacturer of frames makes a Unique frame. Practically all jobbers throughout the country carry Unique frames in stock. Therefore, if a retail lumber and millwork dealer does not have these frames in stock, they can easily be had.

The Unique Sash Balance Before and After Assembly

Here is the tubing of the UNIQUE SASH BALANCE. It is made of copper-bearing, hot-dipped, galvannealed metal. This material is rust-proofed.

Here is the oil-tempered coiled spring which is fastened inside of the above tube. Note the small bushing at the bottom of the spring which is made of hard, die-cast, white metal. It is absolutely rust-proof. This bushing has a slot through which the twisted accelerated rod slides, causing the bushing to revolve.

Here is the twisted accelerated rod which is rust-proofed and is fully described on the next page. Below is the fitting which is fastened to the sash and is also rust-proofed.

Here is shown the UNIQUE SASH BAL-ANCE after it has been completely assembled. The spring is fastened within the tube, the twisted accelerated rod is slipped into the bushing and the sash fitting riveted to the rod, forming one unit. When the metal tube is fastened to the side jamb at the head of the frame and the lower fitting to the bottom of the sash, the sash can be raised or lowered and the twisted accelerated rod will travel up into the tube at the raising of the sash or down to position shown in photograph at right at the lowering of the sash.

TEST NUMBER 2295 COLUMBIA UNIVERSITY TESTING LABORATORIES APRIL 11, 1932, W. J. KREFELD, ENGINEER OF TESTS

Test of Operation

- A. Method of Test:
- Sash operating up and down in a frame simulating window action.
 Test continued for 50,000
- cycles.
- B. Results of Test:
- 1. Operating characteristics unchanged.
- 2. The weight supporting ability of the balance unchanged.
- 3. Twisted rod showed no appreciable wear.
- 4. Rotating bushing slot showed some wear but without any appreciable effect on operation.

Test of Corrosion MADE BY COLIN G. FINK, Ph.D.

- A. Method of Test:
- 1. Salt Spray Test of 80 hours as described by U. S. Bureau of Standards.
- B. Results of Test:
- 1. Spring almost entirely free of rust.
- 2. Spiral and tube showed several minor rust spots.
- 3. In the opinion of Professor Fink, these sash balances when used as intended, may in so far as corrosion resistance is concerned, be expected to last indefinitely.

CONCLUSION:

50,000 CYCLES IS EQUIVALENT TO OPENING AND CLOSING ANY WINDOW IN ACTUAL OPERATION ONCE A DAY FOR 137 YEARS. WE THINK THIS IS CONCLUSIVE.

This Is WHY The Unique Sash Balance

Is The Perfect Balance *

THE UNIQUE SASH BALANCE functions as a perfect balancing device complete within itself and maintains a true balance at any point in the run of the sash. It is not a holding or friction device for the reason that it utilizes a basic mechanical principle which principle assures the constant and everlasting flow of power back and forth between the balance and the sash just as surely as water runs down hill.

This principle is the one of the creating and control of power. In the UNIQUE SASH BALANCE, power is created in the spring by the revolving of the bushing at its lower end around the twisted rod and the power so created is controlled by the changing pitch of the turns of the twisted rod.

In other words as additional lifting power is created in the spring by the revolving of the bushing, this additional lifting power is absorbed in the added work required of the spring to lift the sash up the steeper pitch of the rod. The power created in the spring is synchronized with the pitch of the twisted accelerated rod with the result that A Perfect Balance of power is created between the two at any point. A glance at the photographs at the right will illustrate the princi-

All working parts of the UNIQUE SASH BALANCE ARE CONCEALED, the rigid tubing being the only exposed part. There is No Other Sash Balance that has this Fool-proof Feature.

ples involved and described above.

A UNIQUE SASH BALANCE FOR PRACTICALLY EVERY WEIGHT OF WINDOW

There are four types of Unique Sash Balances, Type D for sash weighing 1 lb. to 20 lbs. each or a 40 lb. window not exceeding 5'-10" in sash opening height, Type C for sash weighing 1 lb. to 30 lbs. or a 60 lb. window, any height up to 12' 0" sash opening, Type M for sash weighing from 30 to 60 lbs. each or a window of 120 lbs., and Heavy Duty Balances for sash from 60 to 100 lbs. each or a 200 lb. window.

SPECIFICATIONS FOR UNIQUE SASH BALANCES

Specify Under Millwork

COUNTER-BALANCING SASH. The sash shall be counter-balanced with Unique Sash Balances manufactured by the Unique Balance Company, Inc., 296 E. 134th Street, New York City, and shall be of the proper type to correctly counterbalance the sash.

FRAMES. All window frames shall be as detailed or shall be regular stock frames, (state which) as manufactured for Unique Sash Balances eliminating pulleys, pockets, and weight boxes.

SASH. All sash shall be as detailed or shall be regular stock sash. (state which). Stiles shall be grooved full length in center. For Type C and Type D balances the groove shall be 5/8" wide. If prefit sash, the groove shall be 5/8" deep. If other than prefit sash the groove shall be 3/4" deep to allow for fitting sash. For Type M and Heavy Duty Balances the grooves shall be 15/16" wide by 15/16" deep after fitting of sash.

AVAILABILITY OF UNIQUE SASH BALANCES AND WEATHERSTRIP

Unique Sash Balances and Unique Weatherstrips are sold by all leading lumber and millwork dealers and are immediately available.

NOTE. For convenience, attention is again called here to the carrying capacity of the several types of balances.

Type D 1 to 20 lbs. each sash or 40 lb. window.

Type C 1 to 30 lbs. each sash or 60 lb. window.

Type M 30 to 60 lbs. each sash or 120 lb. window.

Type Heavy Duty 60 to 100 lbs. each sash or 200 lb. window.

WEATHERSTRIPPING

For use with Unique Sash Balances the Unique Balance Company make a Double Lock Weatherstrip. The following specification describes the same.

UNIQUE DOUBLE LOCK WEATHERSTRIP. All windows shall be weatherstripped with Unique Double Lock Weatherstrip,

manufactured by the Unique Balance Company, Inc. See page 32. Details not necessary, specify by name.

If an architect has a preference for another type of weatherstrip, practically all the leading weatherstrip manufacturers in the country manufacture one or more types of weatherstrip to work in combination with the Unique Sash Balance.

Will a Balance on One Side of a Sash Properly Counterbalance the Sash? No

WRONG WAY

← ONE BALANCE ONLY

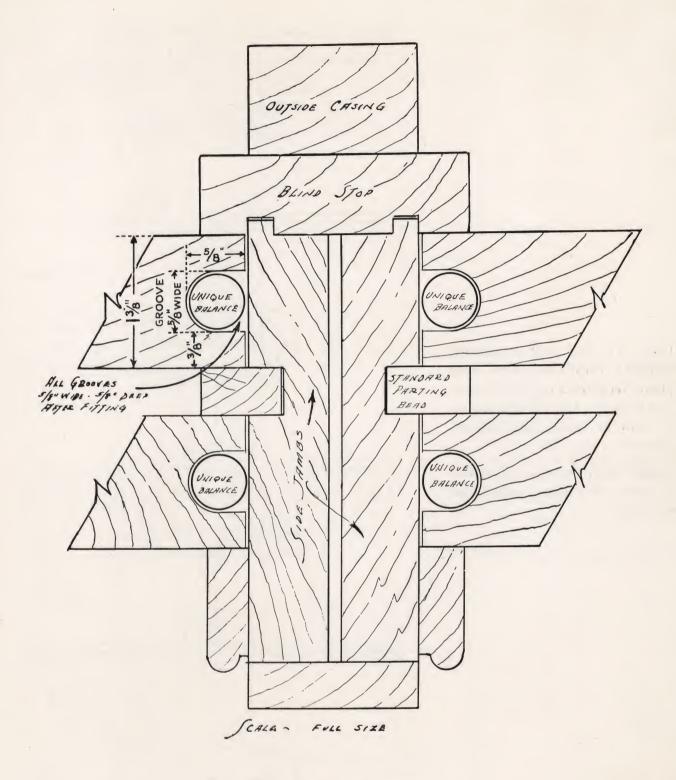
Neither can a sash be expected to last when entire weight hangs suspended from one side causing continuous racking of joints as sash is raised and lowered. RIGHT WAY



The pictures shown above clearly illustrate the ultimate result of attempting to operate a sash from one side only. At the time of installation the sash may appear to be square in the frame if fitted tightly but as time goes on the side of the sash without a counter-balance even though equipped with an auxiliary roller

or the like will wear down rapidly, resulting in a loosely and ill-fitting sash much to the home owner's regret and inconvenience.

WE DO NOT RECOMMEND attempting to operate a sash from one side. Unique Balances are so economical that no one is warranted in using a makeshift installation of any type.



MULLION WINDOW

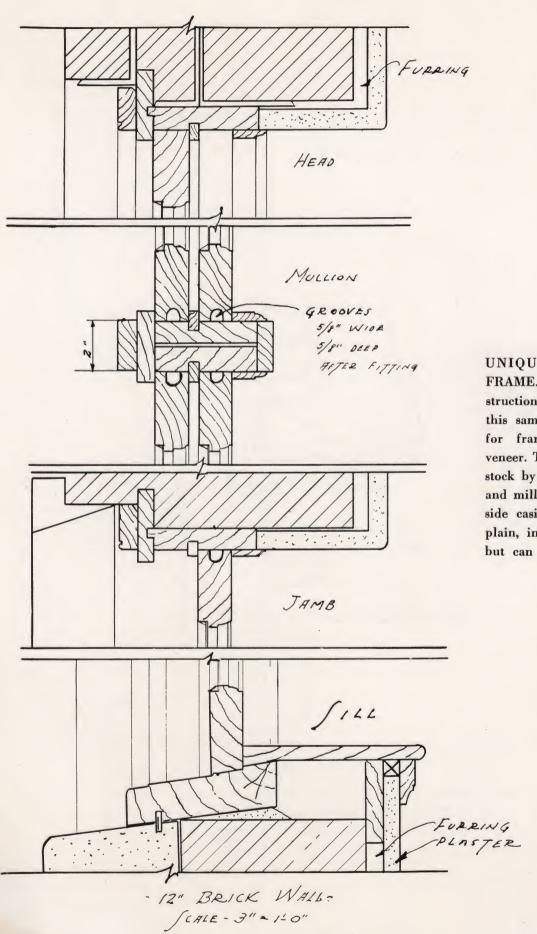
Narrow mullions are always desirable and Unique Sash Balances permit a very narrow mullion as shown above. Also remember old Colonial architecture required narrow dormers. This is now possible with Unique Sash Balances since 8" of weight box room is eliminated.

SIDING. SHEATHING. HEAD MULLION GROOVES 5/8" WIDE 5/8" DEED HEJER FITTING JAMB (ILL 2x4 Stups FRAME WALL

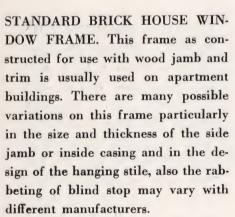
SCALE 3"-1:0"

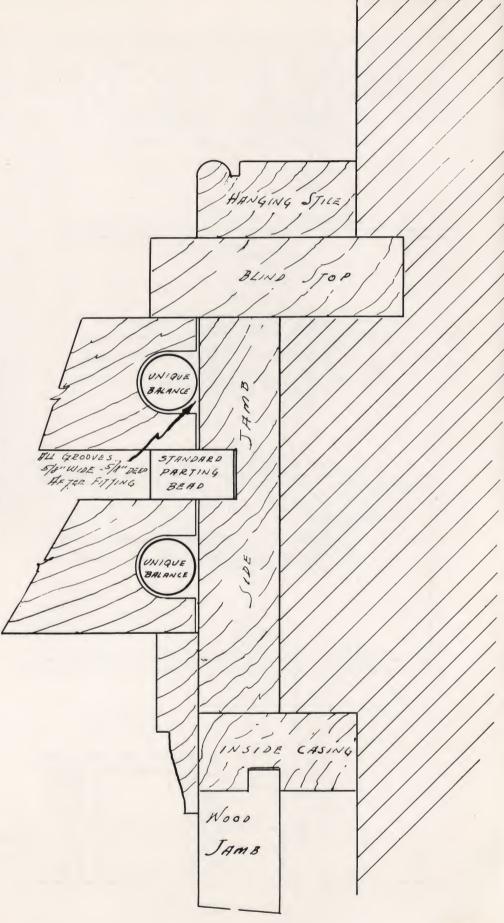
UNIQUE FRAME FOR FRAME OR SHINGLE CONSTRUCTION. Note plaster reveal or a very narrow trim may be used. This frame is carried in stock by lumber and millwork dealers.

Frame details shown on the following pages will use same mullion construction.



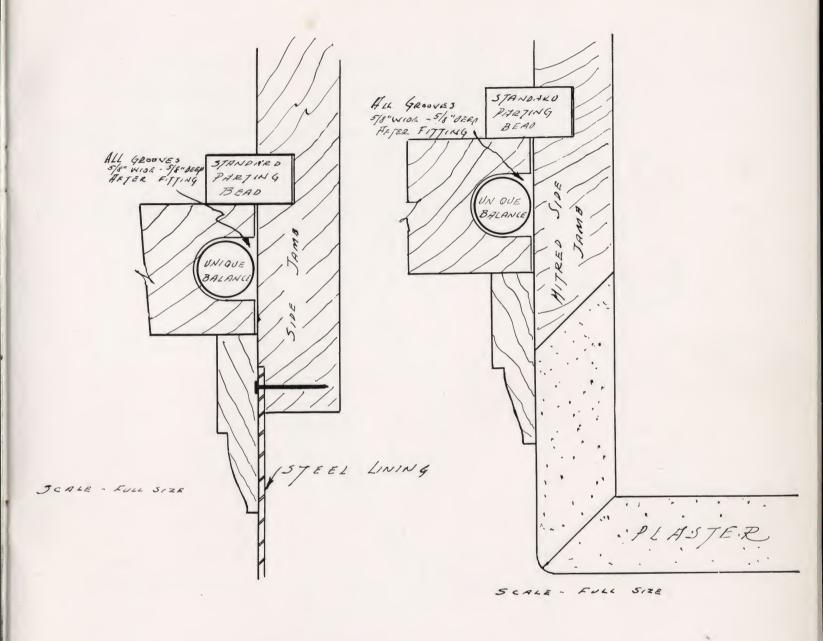
UNIQUE COMBINATION FRAME. Although this construction shows a brick wall, this same frame may be used for frame, stucco, or brick veneer. This frame is carried in stock by practically all jobbers and millwork dealers. The outside casing or hanging stile is plain, in most cases as shown, but can be molded if desired.





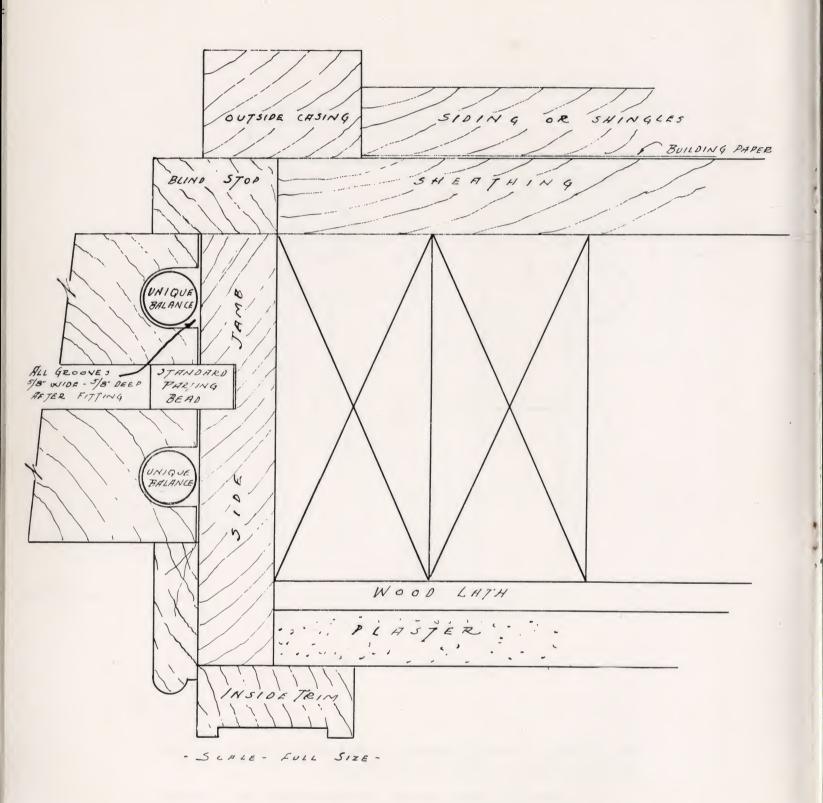
. SCALE - FULL SIZE -

Page Fourteen



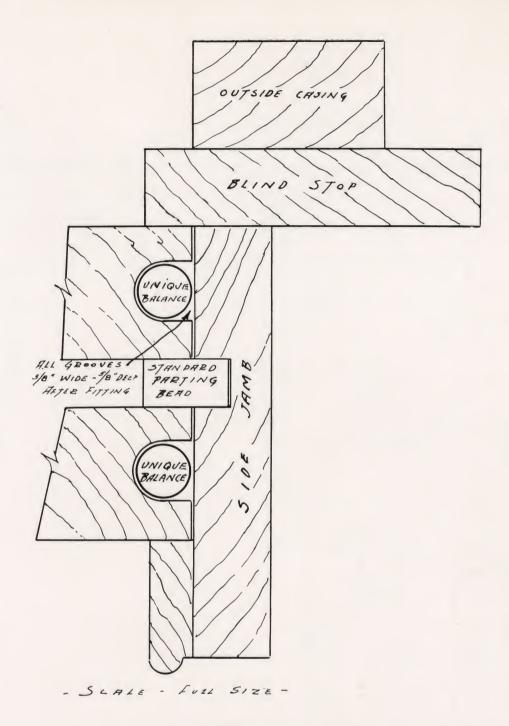
Above, to left, is illustrated application of steel casing or window lining to brick window frame in apartment house construction.

To right, is illustrated another variation of a brick window frame in which for the sake of economy the side jamb is mitred to form a key for a plaster reveal. The construction on this page and on page 14 permit a large proportion of glass and ventilating area in relation to the sizes of the masonry opening.



STOCK FRAME HOUSE FRAME

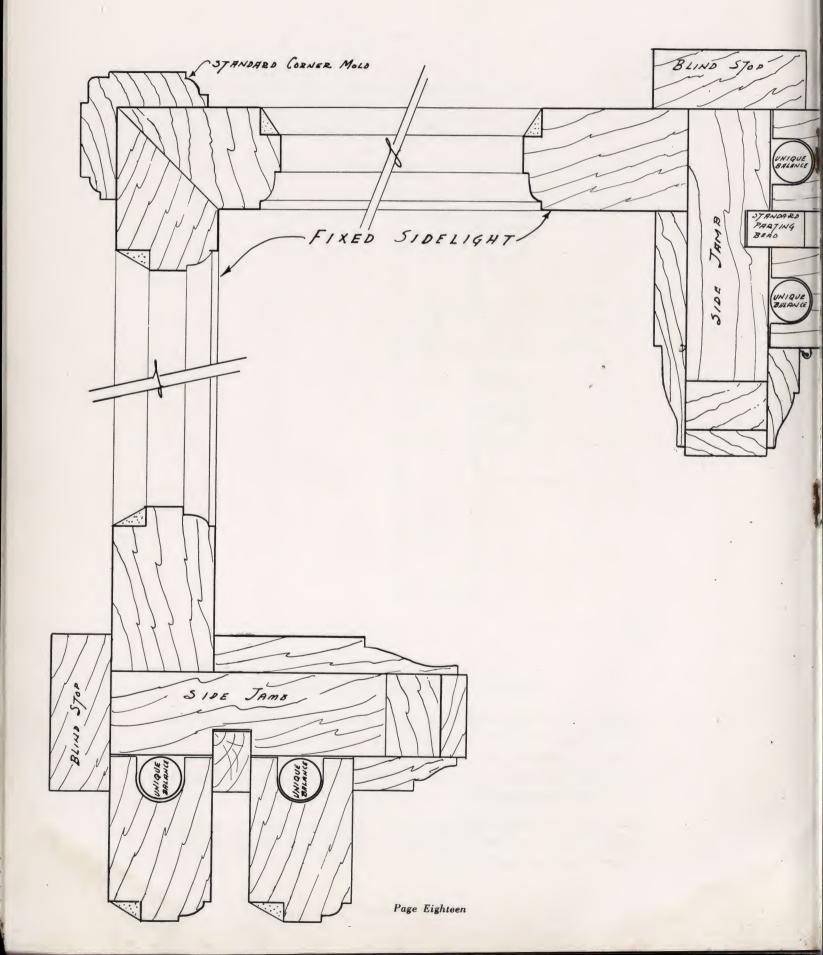
A regular frame house frame the same as on page 12. The trim on inside may be of any design and as narrow as 1" if desired.

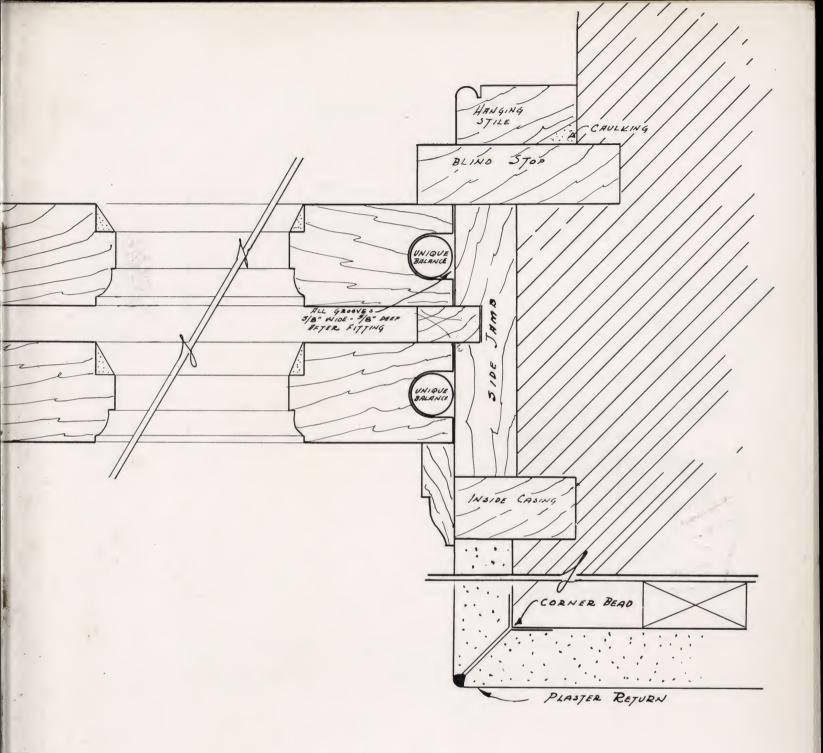


UNIQUE COMBINATION FRAME

A regular stock Unique combination frame carried in stock by practically all millwork dealers throughout the country. This frame is for brick, brick veneer or frame construction. It is the same as illustrated on page 13. The head construction is the same as side jambs. Sill in all cases is regular stock construction as illustrated on page 13.

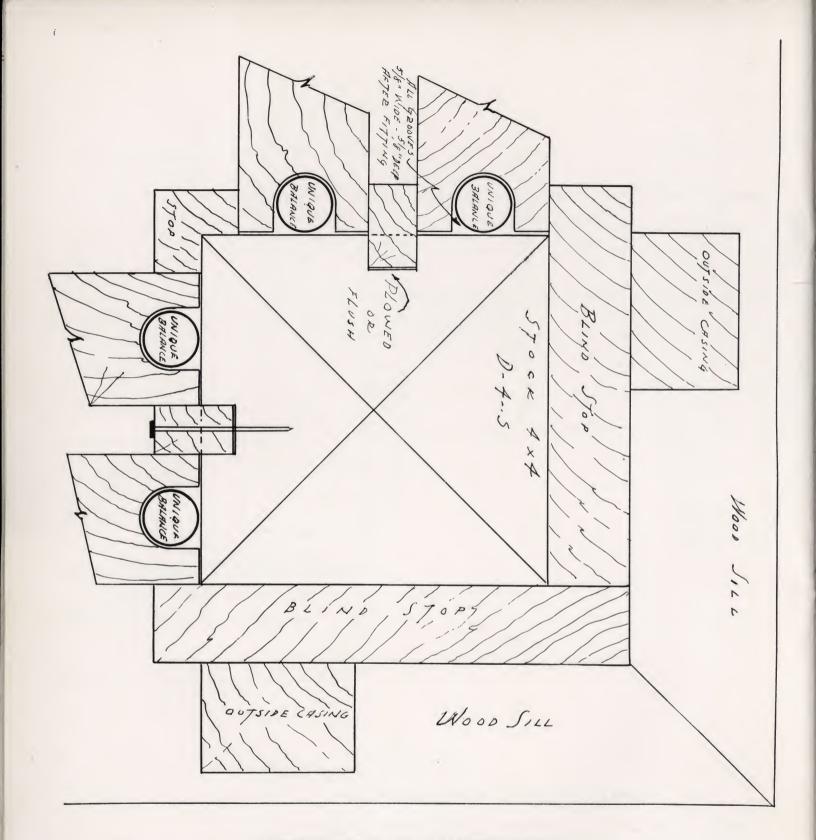
FOR BRICK VENEER CONSTRUCTION. If air space between brick and sheeting is wanted, set frame so that blind stop sets on top of sheeting and nail a 1" liner on inside of frame jamb.





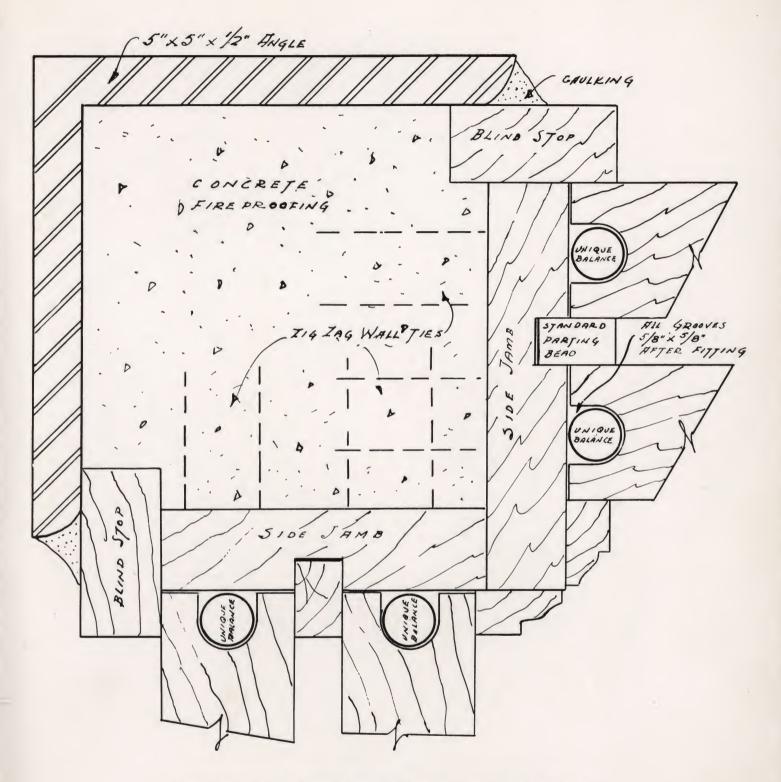
CORNER WINDOW CONSTRUCTION

Here is a corner window that is built up entirely of stock material. The fixed sash at the corner affords such beautiful narrow lines that the most critical architect or layman would be compelled to admire them. This type of window is used only with cantilever construction. The fixed sash may be of any size desired.



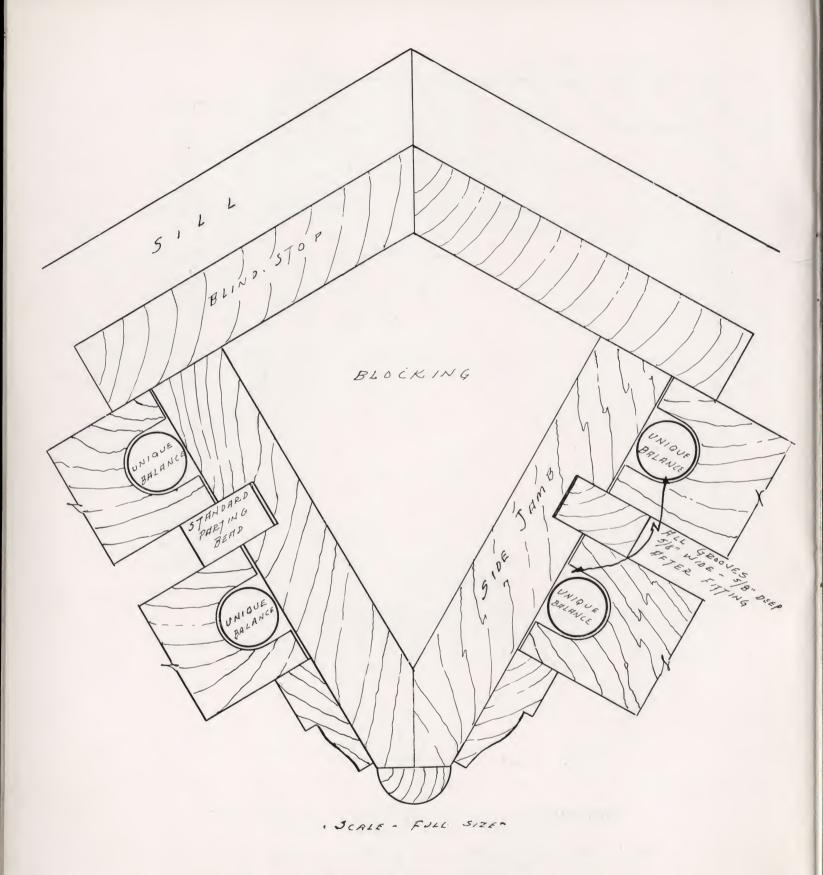
CORNER WINDOW CONSTRUCTION

Corner window construction using a stock 4 x 4 dressed down to 3-5/8 x 3-5/8 which serves as a corner post as well as side jamb. In heavier construction a lally column may be used instead of the 4 x 4. When this is done a regular stock frame side jamb must be used for sash to slide in, forming a regular box around the lally column.



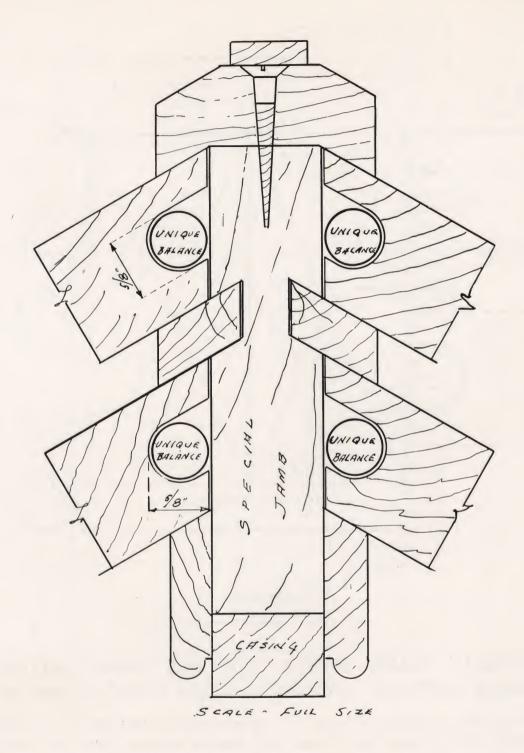
FIRE-PROOF CORNER WINDOW CONSTRUCTION

Another type of corner window where an angle iron is used and backed up with concrete for fire proofing, a requirement in some cities. Wall ties are nailed to the side jamb of frame before concrete is poured, or if 2×4 jamb blocks are set in concrete 18" apart, frame can be nailed in place after concrete work is completed.



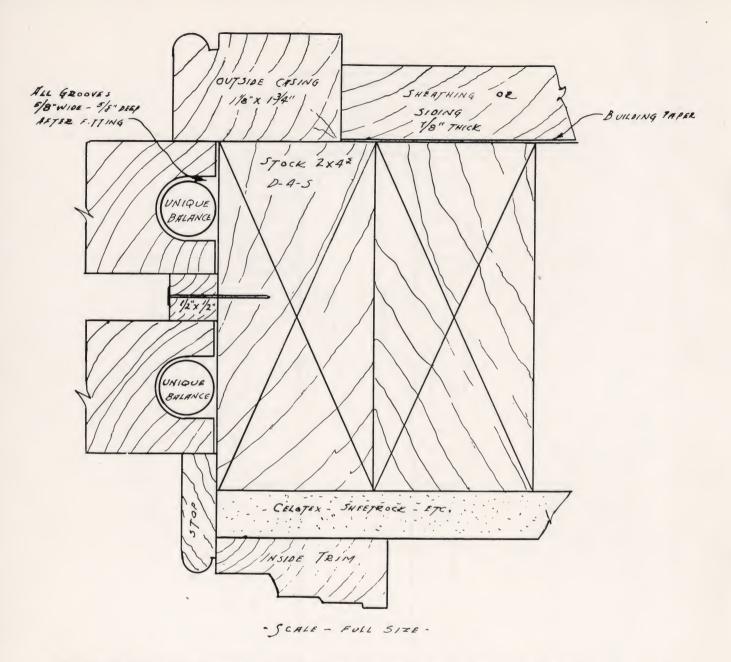
BAY WINDOW CONSTRUCTION

A mullion bay window in either brick or frame construction. The size of the blocking depends on the angle of the bay.



BAY WINDOW CONSTRUCTION

Another type of narrow mullion for a bay window in either brick or frame construction. This type of bay requires some extra millwork and good workmanship. The sash must be fitted first and then grooved for balances. It is also necessary to put the sash in from the outside which is easily done with the detachable blind stop. Beautiful narrow lines never before achieved amply repay the small extra cost of this type of construction.

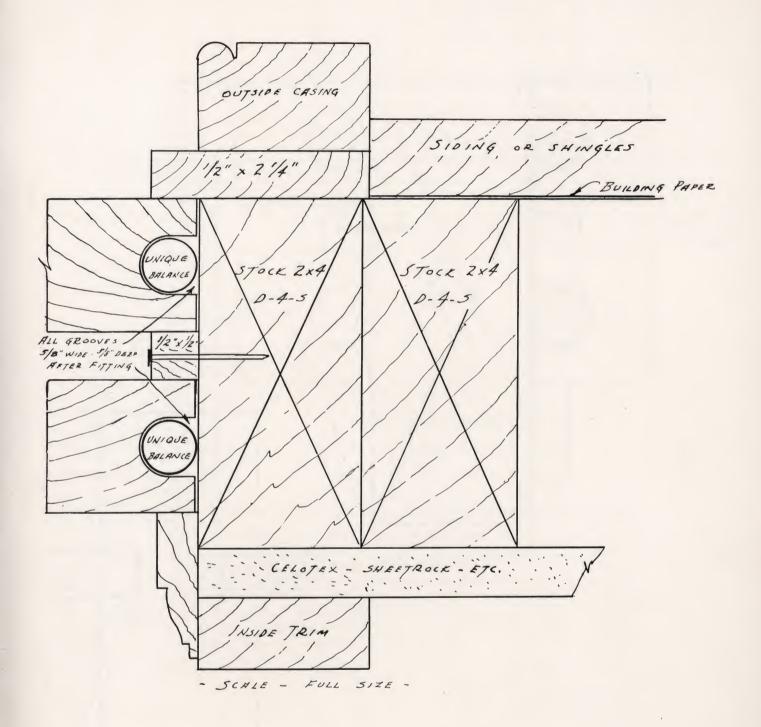


ECONOMICAL FRAME CONSTRUCTION FOR PORCH ENCLOSURES, SUMMER COTTAGES, AND MANY OTHER TYPES OF BUILDINGS

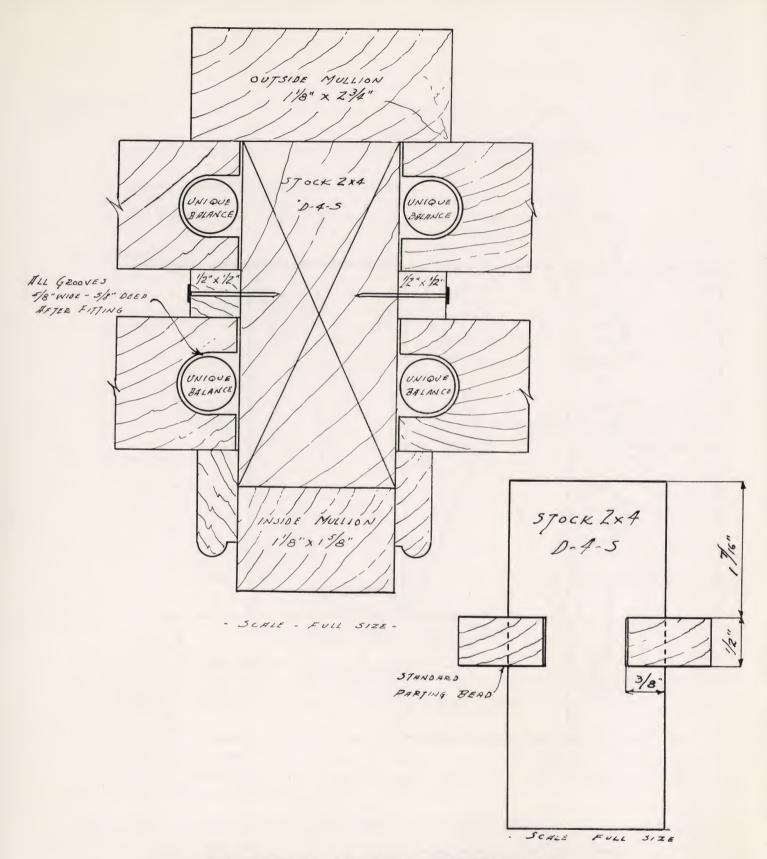
On this page and on pages 25, 26, and 27, you will see a series of details for the most economical double-hung window construction. Sections show jambs of windows in which the framing stude also function as window frames. In all cases head and jamb are similar. Any standard sill may be used or even rough lumber planed to a bevel.

Above is shown a single construction as customarily used for summer bungalows, barracks, and light structures.

A stock 2 x 4 doubled at sides and head is framed to exact dimensions of sash opening. $1/2" \times 1/2"$ is tacked to 2 x 4 to serve as a parting strip. Outside casing of 1-3/8" x 1-3/4" lumber serves as blind stop as well as trim. Inside trim and stop are interchangeable. Any stock design or even plain lumber may be used. Of course the type of frame determines the sizes of stock.



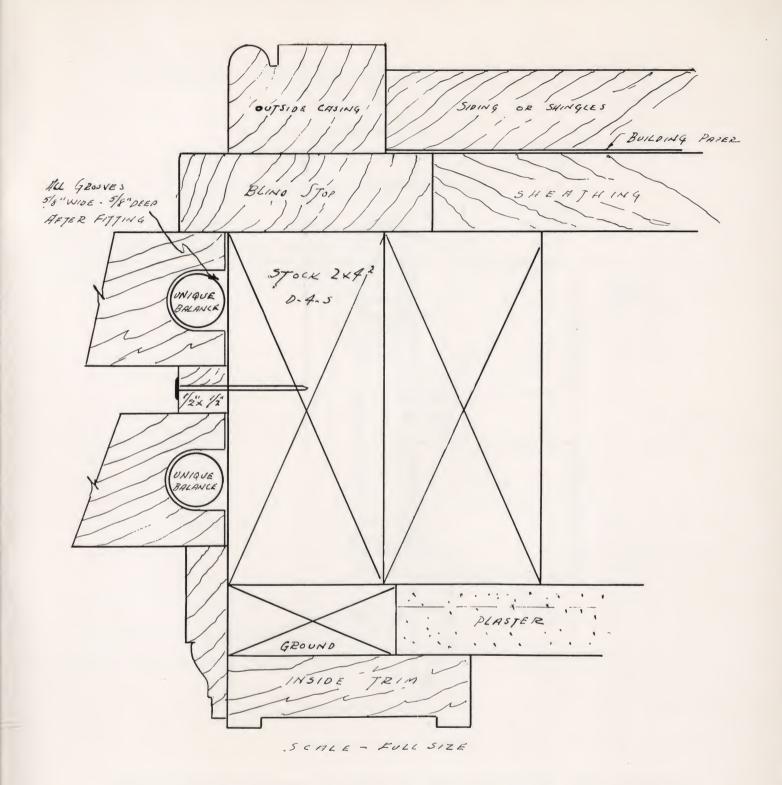
Construction identical as on page 24 except that $1/2" \times 2-1/4"$ strip is added to serve as a blind stop making possible the use of stock screens or storm sash.



ECONOMICAL MULLION CONSTRUCTION

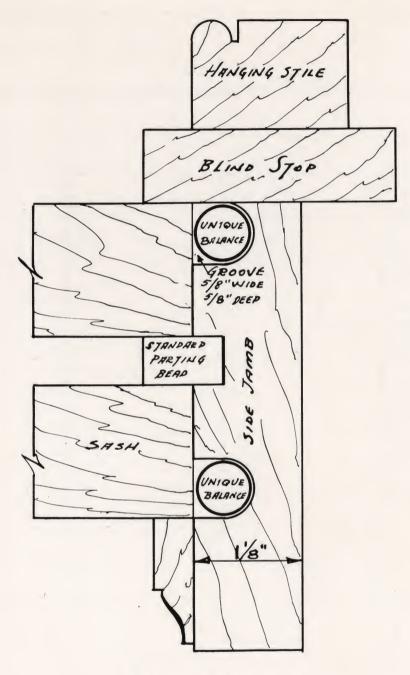
Here is the narrow mullion for identical type of construction.

To right, stock 2 x 4 ploughed for parting strip. This has a slight advantage over tacked parting strip and may be done in any of the identical types of construction if tools for ploughing are available.



ECONOMICAL FRAMING

Here is a similar home-made window frame except that the standard blind stop is used to enable the use of sheeting as well as siding for double construction. In this case plaster is shown necessitating a wider stop-bead.

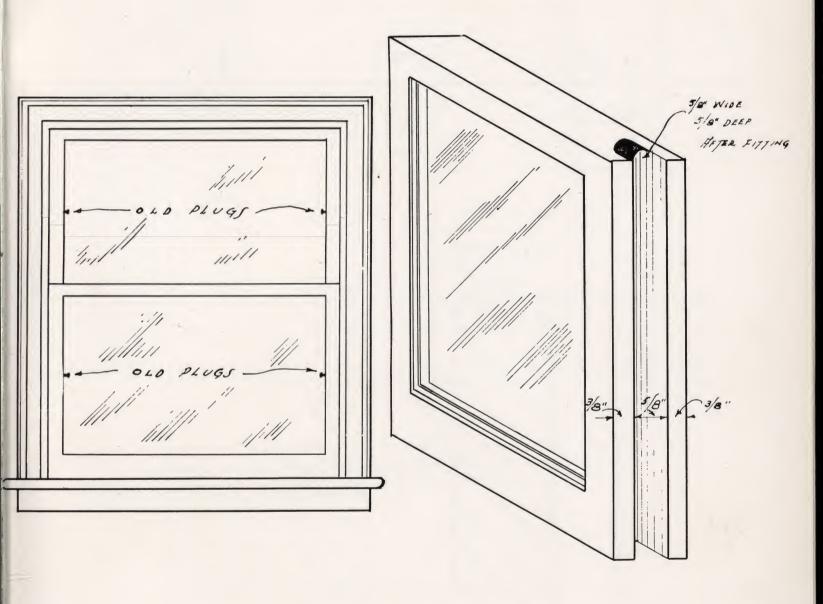


SCALE . FULL SIZE

ANOTHER TYPE OF FRAME MADE POSSIBLE BY UNIQUE SASH BALANCES

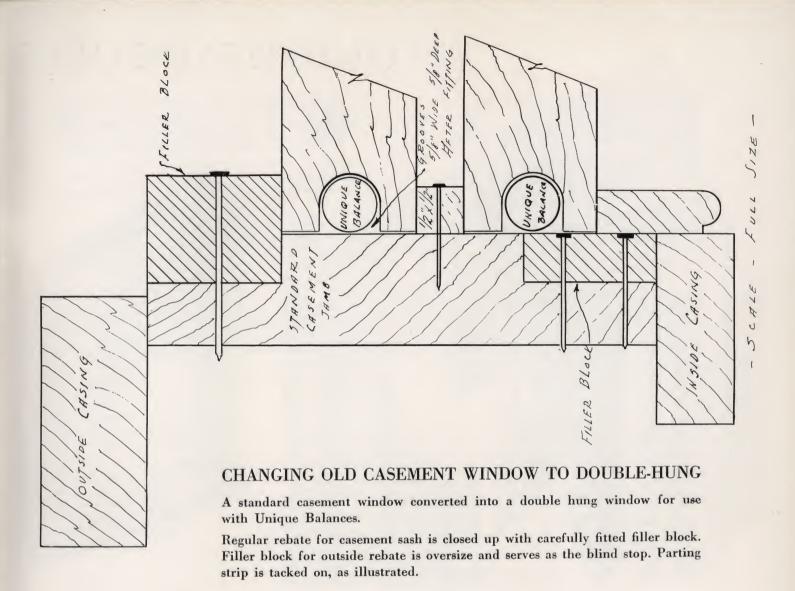
The above illustrates a regular frame with $1\frac{1}{8}$ "side jamb. With this thickness of jamb, the entire groove may be in the side jamb omitting the groove in sash entirely. The groove may be in center between blind stop and parting bead or between inside stop and parting bead instead of in corner as shown on drawing. This is a matter of choice. This construction is extremely neat since nothing appears in the sash run. This type of construction is used by a number of manufacturers at the present time.

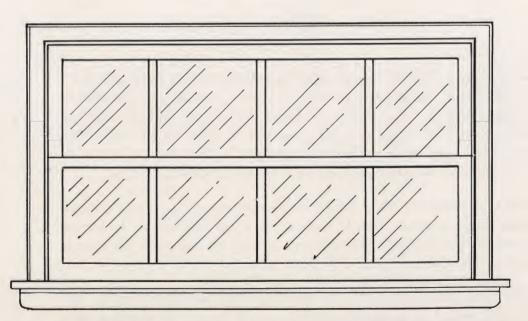
OLD WINDOWS WITHOUT ANY BALANCING ARRANGEMENT



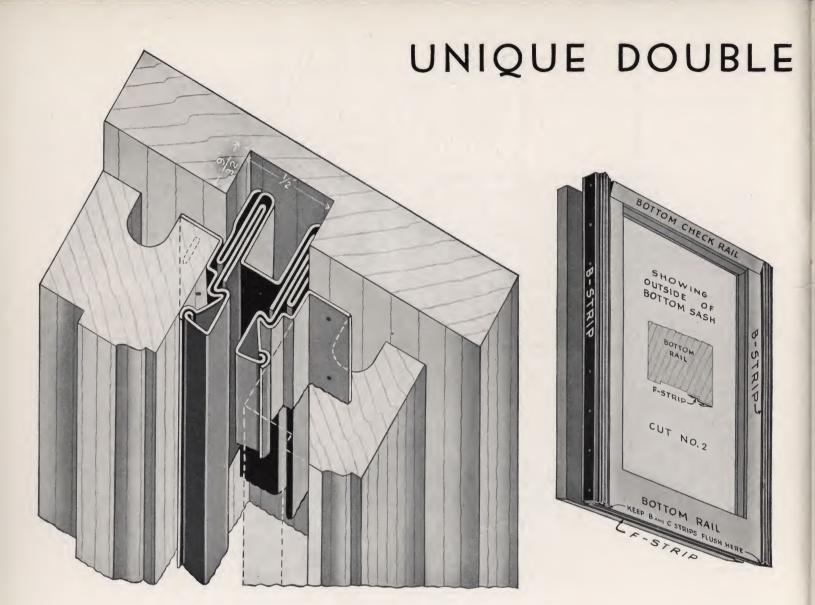
Here is an old window without weights, cords, pulleys or any balancing device. To counter-balance the sash with Unique Sash Balances it is only necessary to remove the sash, groove 5/8" x 5/8" down the center of side sash stile full length as shown above. Frame remains as is. Put sash back in place and install Unique Sash Balances as recommended by manufacturer's instructions.

CONVERSION OF UNSATISFACTORY WINDOWS Here are shown plates covering a pulley hole where pulleys have been removed and Unique Sash Balances have replaced the weights and cord. There is no change necessary on the frame but the old sash must be grooved 5/8" x 5/8" the full length of each side. See page 29. CLOSURE PLATES OF ANY SUITABLE RIGID BRADS





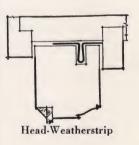
A wide window, not very high. It was often necessary to use lead weights to counter-balance this type of window. Unique Sash Balances have solved this problem.



Above is shown the Unique Double Lock Weatherstrip. With this strip the regular wood parting bead is eliminated, the metal strip taking its place. You will note one piece of metal is nailed on to the sash and another piece shaped so that it will fit into the groove of the parting bead strip then locked over the piece that is nailed to the sash. This assures ease of operation as well as maximum weathertightness. It is not necessary to do any work on the sash when using this strip and yet it has the interlocking feature.

HEAD AND SILL FURNISHED TWO WAYS. To the right above Type D strip is shown which is a spring bronze material. This is used on top of top sash and on the bottom of lower sash and also the check rail. For this type of head, sill and check rail there is nothing to be done to the sash.

ANOTHER TYPE OF HEAD AND SILL. At the lower right we show a regular zinc rib strip. This can be had in combination with the regular double lock side strips at a slight extra charge. When ordering this weatherstrip be sure to specify if zinc head and sill is wanted. Otherwise we will fill your order with the regular bronze head and sill strips shown on page 33.

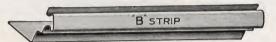




LOCK WEATHER-STRIP



4 "A" strips. I short and I long piece in each parting stop groove on each side. Run from sill into head jamb with felt block center at meeting



4 "B" strips, 2 pieces 1/4" shorter than bottom sash, 2 pieces 3/4" shorter than top sash.



4 "C" strips same length as "B" with adjustable dust blocks.



I "D" strip for top check rail 11/8" shorter than sash width over-all.

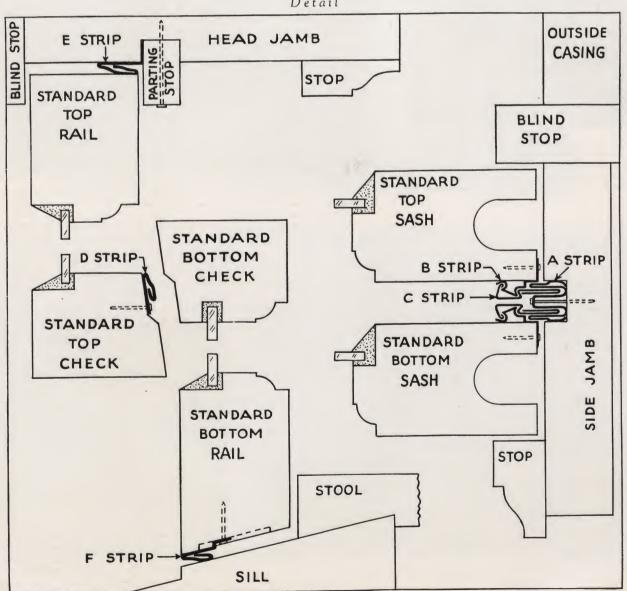


I "E" strip for head jamb, same length as width of sash opening.



I "F" strip for bottom rail 1/8" shorter than sash width over-all.

Detail



A FEW VIEWS OF THE UNIQUE SASH BALANCE FACTORY

THE pictures shown illustrate a few of the many complicated, intricate, and costly machines and the departments necessary to manufacture the Unique Sash Balance. The low cost of the balance is made possible because of these modern machines which automatically turn raw material, purchased in car load lots for all parts of the balance, into springs, tubes, fittings, spiral rods, and the many other items necessary to complete the balance. The ever increasing demand for Unique Sash Balances to the already large output, constantly keeps our engineering department busy building additional machines.



A few of a battery of automatic punch presses. Rolls of material are automatically fed into these machines and fittings such as hangers, feet, etc., are punched out and bent to shape at the rate of 84 pieces per minute from each machine.



One of a number of tube rolling machines. Here again large metal sheets are purchased in the raw in carload quantities, cut to the correct width in our metal slitting department, then put through this rolling machine which forms a metal tubing for the Unique Sash Balance. The metal travels through this machine at the rate of 120 feet per minute.



Here is the home of the Unique Sash Balance.



Here is part of our weatherstrip department. There are two other departments with similar machines for our various types of weatherstrip. Material is rolled to correct shapes and sizes and automatically cut to correct lengths by this modern up-to-date machinery.



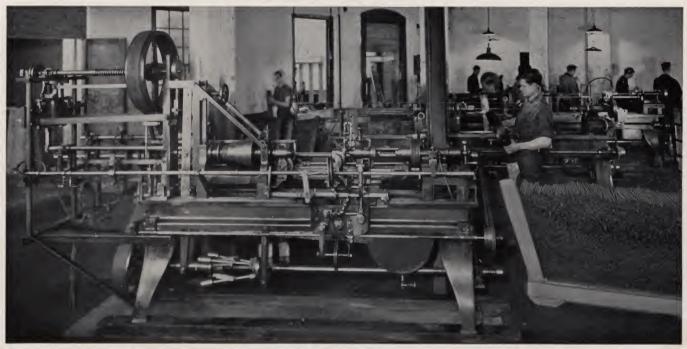
A few of a battery of special spring machines which make special springs. These machines are automatic. Large coils of wire are turned into springs of correct diameter and length.



A few of a battery of riveting machines which rivet the sash fitting and spiral rod together.



One of a battery of spiral machines that twist the accelerated rod. These machines are automatic.



A battery of spring machines which are completely automatic. These machines roll springs to the exact diameter and length from large coils of spring wire for regular stock balances.



BETWEEN 166th and 167th STREETS on GRAND CONCOURSE, N. Y. C.

Architect, Horace Ginsburn

Builder, Sam Cohn

Equipped with Unique Sash Balances

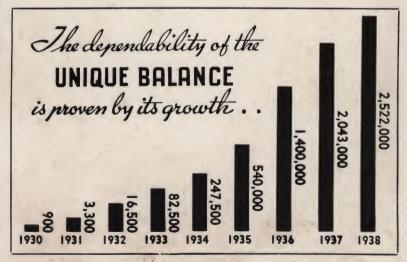
NEW WAY



This construction is solid and weather-tight. There are no weight boxes, pulley holes, or pockets for cold air to seep through.

Keep in Line with the Tremendous Progress in Architectural Design and Building Construction.

USE UNIQUE SASH BALANCES and UNIQUE WEATHERSTRIP



OLD WAY



This antiquated construction permits much cold air leakage into a room through weight boxes, pulley holes, and pockets.

EFFECTIVE MARCH 1st, 1940

GENERAL PRICE LIST No. 1007 UNIQUE WEATHERSTRIPS

Notice—All Previous Prices Withdrawn.

List Prices - UNIQUE DOUBLE LOCK WEATHERSTRIPS

Sash Opening	1'-6"	2'-0''	2'-6"	2'-10"	3'-2"	3'-6"	3'-10"	4'-2"	4'-6"	4'-10"	5'-2"	5'-6"	5'-10"	6'-2"	6'-6"
Cross Pieces	.17	.19	.21	.22	.23	.25	.26	.28	.29	.30	.31	.32	.33	.34	.35
Vertical Pieces	.81	.88	.98	1.05	1.12	1.19	1.26	1.33	1.40	1.47	1.54	1.61	1.68	1.75	1.82

- EXTRAS -

Add .04 list per set if widths and heights are packed separately.

Add .01 list per set for each 2" over 6' 6" wide.

Add .07 list per set for each 4" over 6' 6" high.

Add .03 list per set for 7/8" wide rib strip for head instead of bronze E strip.

Add .03 list per set for 1/8" wide rib strip for sill instead of bronze F strip.

Prices based on "D" Check Rail, "E" Head and "F" Bottom Rail Strips, Double Lock Side Strips, Nails and Instructions. Packed Complete in Sets for any type double hung wood window using 1/2" parting stop.

NOTE: If Double Lock Weatherstrip is required for use where 3/8" parting stop grooves occur ORDER MUST SPECIFY SAME.

UNIQUE BALANCE COMPANY, Inc. 296 East 134th Street, New York

See Other Side for Balance Prices

EFFECTIVE MARCH 1st, 1940

GENERAL PRICE LIST No. 1007 UNIQUE SASH BALANCES

Notice—All Previous Prices Withdrawn.

List Prices - UNIQUE BALANCES - Per Set

	TYPE	LIST	DESCRIPTION
5	"D"	\$1.90	PRICED per set of four balances complete for "Double Hung" wood openings up to and including 5' 6" high sash openings, where the weight of either sash is from one to not exceeding 30 pounds.
00	"C"	2.60	PRICED per set of four balances complete for "Double Hung" wood openings up to and including 5' 6" high sash openings, where the weight of either sash is from one to not exceeding 30 pounds.
	"M"	5.50	PRICED per set of four balances complete for "Double Hung" wood openings up to and including 6' 6" high sash openings, where the weight of either sash is from 30 to not exceeding 60 pounds. Order must specify weights of sash.
	"H.D."	7.00	PRICED per set of four balances complete for "Double Hung" wood openings up to and including 6' 6" high sash openings, where the weight of either sash is from 60 to not exceeding 100 pounds. Order must specify weights of sash.

- BALANCE EXTRAS -

To TYPE "D" and "C" list add 14c list per 4" over 5' 6" high up to 12' 0" high sash opening.

To TYPE "D" and "C" list add 5c list for lug fittings.

To TYPE "M" and "H.D." list add 30c list per 4" over 6' 6" high up to 12' 0" high sash opening. To TYPE "M" and "H.D." list add \$1.00 list for lug fittings. (Send sample of lug with order.)

— VERY IMPORTANT —

Do not figure, order or supply "D" balances for a sash weighing over 30 pounds or over 12' 0" high sash opening. Do not figure, order or supply "C" balances for a sash weighing over 30 pounds or over 12' 0" high sash opening. Where sash weigh from 30 to 60 pounds type "M" balances must be used.

Where sash weigh from 60 to 100 pounds type "H.D." balances must be used.

— GROOVING SASH FOR BALANCES —

For Type "D" or "C" groove must be 5%" x 5%" after fitting, 5%" wide x 34" deep if sash are to be fitted on job. For Type "M" or "H.D." groove must be 15/16" x 15/16" after fitting, 15/16" wide by 1-1/16" deep if sash are to be fitted on job.

be fitted on job.

All standard type "D" & "C" Unique Sash Balances are built for hanging to side jambs. Balances to be hung from head are furnished special at no additional cost. If wanted, please specify. Type "M" and "H.D." are for side hanging only.

IF FOR OTHER THAN STANDARD WESTERN LAYOUT GIVE SASH OPENING SIZES.

UNIQUE BALANCE COMPANY, Inc. 296 East 134th Street, New York

- See Other Side for Weatherstrip Prices -

UNIQUE BALANCE COMPANY, Inc.

296 EAST 134th STREET NEW YORK, N. Y.

CHART FOR ORDERING TYPE "D" UNIQUE SASH BALANCES IN COMPLETE SETS BY NUMBERS

SASH OVER 30 POUNDS MUST NOT BE HUNG ON "D" BALANCES

One set of type "D" balances consisting of 4 balances will counterbalance both sash of a double hung window where weight of either sash does not exceed 30 pounds. (2 balances per sash.)

NOTE: When ordering half sets (2 balances) for balancing one sash, give number on chart and state SPECIFICALLY whether for upper or lower sash.

Where sash are not prefit, groove stiles $\frac{5}{8}$ " wide x $\frac{3}{4}$ " deep to receive balances. When sash are prefit, or grooved after fitting, make groove $\frac{5}{8}$ " x $\frac{5}{8}$ ".

For sash glazed with single or double thick glass and not over 13/8" thick, type "D" balances of the proper size may be used for any sash opening shown on this chart.

Where sizes required end in 3 above 273 use next higher number as 274 if sash are 13/4" thick.

Where sizes required end in 4 above 324 the use of $1\frac{3}{4}$ " sash instead of $1\frac{3}{8}$ " may run weights above 30 pounds per sash. Watch such sizes closely as to weight and order "M" type balances if over 30 pounds per sash.

Where sizes of sash are other than Western Stock openings, use balance numbers corresponding to glass size and specify type of opening such as Ohio, Boston, etc. Also give sash opening width and height.

Where sash are odd sizes, or have other than standard stiles and rails, such as Queen Ann or circle heads, give glass sizes of top and bottom sash, also overall sash opening size and overall height of bottom sash. If sash are other than square head send sketch showing spring line.

AL. No.	SASH OPENING	GLASS SIZE	BAL. No.	SASH OPENING	GLASS SIZE
	WIDTH HEIGHT	WIDTH HEIGHT		WIDTH HEIGHT	WIDTH HEIGHT
101	1'2" to 3'8" x 2'2"	10" to 40" x 10"	294	3' 11" to 4' 4" x 5' 4"	43" to 48" x 29"
iii	1'2" to 3'8" x 2'4"	10" to 40" x 11"	301	1'2" to 1'8" x 5'6"	10" to 16" x 30"
121	1'2" to 3'8" x 2'6"	10" to 40" x 12"	302	1'9" to 2'8" x 5'6"	17" to 28" x 30"
131	1'2" to 3'8" x 2'8"	10" to 40" x 13"	303	2'9" to 3'8" x 5'6"	29" to 40" x 30"
141	1'2" to 3'8" x 2'10"	10" to 40" x 14"	304	3'9" to 4'4" x 5'6"	41" to 48" x 30"
151	1' 2" to 3' 2" x 3' 0"	10" to 34" x 15"	311	1'2" to 1'8" x 5'8"	10" to 16" x 31"
152	3'3" to 4'4" x 3'0"	35" to 48" x 15"	312		17" to 28" x 31"
161	1'2" to 3'2" x 3'2"	10" to 34" x 16"	313	1'9" to 2'8" x 5'8" 2'9" to 3'8" x 5'8"	29" to 40" x 31"
162	3' 3" to 4' 4" x 3' 2"	35" to 48" x 16"	314	3'9" to 4'4" x 5'8"	41" to 48" x 31"
171	1'2" to 3'0" x 3'4"	10" to 32" x 17"	321	1'2" to 1'8" x 5'10"	
172	3'1" to 4'4" x 3'4"	33" to 48" x 17"	322	1'9" to 2'6" x 5'10"	
181	1' 2" to 2' 10" x 3' 6"	10" to 30" x 18"	323	2'7" to 3'8" x 5'10'	
182	2'11" to 4'4" x 3'6"	31" to 48" x 18"	324	3'9" to 4'4" x 5'10"	
191	1' 2" to 2' 10" x 3' 8"	10" to 30" x 19"	332	1'2" to 2'4" x 6'0"	10" to 24" x 33"
192	2'11" to 4'4" x 3'8"	31" to 48" x 19"	333	2'5" to 3'6" x 6'0"	25" to 38" x 33"
201	1' 2" to 2' 6" x 3' 10"	10" to 26" x 20"	334	3' 7" to 4' 4" x 6' 0"	39" to 48" x 33"
202	2' 7" to 4' 4" x 3' 10"	27" to 48" x 20"	342	1' 2" to 2' 4" x 6' 2"	10" to 24" x 34"
211	1'2" to 2'6" x 4'0"	10" to 26" x 21"	343	2' 5" to 3' 4" x 6' 2"	25" to 36" x 34"
212	2'7" to 4'4" x 4'0"	27" to 48" x 21"	344	3' 5" to 4' 4" x 6' 2"	37" to 48" x 34"
221	1' 2" to 2' 6" x 4' 2"	10" to 26" x 22"	352	1' 2" to 2' 4" x 6' 4"	10" to 24" x 35"
222	2'7" to 4'4" x 4'2"	27" to 48" x 22"	353	2'5" to 3'4" x 6'4"	25" to 36" x 35"
231	1'2" to 2'4" x 4'4"	10" to 24" x 23"	354	3'5" to 4'4" x 6'4"	37" to 48" x 35"
232	2'5" to 4'4" x 4'4"	25" to 48" x 23"	362	1'2" to 2'2" x 6'6"	10" to 22" x 36"
241	1' 2" to 2' 4" x 4' 6"	10" to 24" x 24"	363	2'3" to 3'0" x 6'6"	23" to 32" x 36"
242	2'5" to 4'4" x 4'6"	25" to 48" x 24"	364	3'1" to 4'4" x 6'6"	33" to 48" x 36"
251	1' 2" to 2' 2" x 4' 8"	10" to 22" x 25"	372	1'2" to 2'2" x 6'8"	10" to 22" x 37"
252	2'3" to 4'4" x 4'8"	23" to 48" x 25"	373	2'3" to 3'0" x 6'8"	23" to 32" x 37"
261	1' 2" to 2' 2" x 4' 10"	10" to 22" x 26"	374	3'1" to 4'4" x 6'8"	33" to 48" x 37"
262	2'3" to 4'4" x 4'10"	23" to 48" x 26"	382	1' 2" to 2' 0" x 6' 10'	
271	1' 2" to 2' 0" x 5' 0"	10" to 20" x 27"	383	2'1" to 3'0" x 6'10'	
272	2'1" to 3'6" x 5'0"	21" to 38" x 27"	384	3'1" to 4'4" x 6'10'	
273	3' 7" to 4' 4" x 5' 0"	39" to 48" x 27"	392	1'2" to 1'10" x 7'0"	10" to 18" x 39"
281	1'2" to 1'10" x 5'2"	10" to 18" x 28"	393	1'11" to 3' 0" x 7' 0"	19" to 32" x 39"
282	1'11" to 3'0" x 5'2"	19" to 32" x 28"	394	3'1" to 4'4" x 7'0"	33" to 48" x 39"
283	3'1" to 4'4" x 5'2"	33" to 48" x 28"	402	1'2" to 1'10" x 7'2"	10" to 18" x 40"
291	1' 2" to 1' 8" x 5' 4"	10" to 16" x 29"	403	1'11" to 3'0" x 7'2"	19" to 32" x 40"
292 293	1'9" to 2'10" x 5'4" 2'11" to 3'10" x 5'4"	17" to 30" x 29" 31" to 42" x 29"	404	3'1" to 4'4" x 7'2"	33" to 48" x 40"

CHART FOR ORDERING TYPE "C" UNIQUE SASH BALANCES IN COMPLETE SETS BY NUMBERS

SASH OVER 30 POUNDS MUST NOT BE HUNG ON "C" BALANCES

One set of type "C" balances consisting of 4 balances will counterbalance both sash of a double hung window where weight of either sash does not exceed 30 pounds. (2 balances per sash.)

NOTE: When ordering half sets (2 balances) for balancing one sash, give number on chart and state SPECIFICALLY whether for upper or lower sash.

Where sash are not prefit, groove stiles $\frac{5}{8}$ " wide x $\frac{3}{4}$ " deep to receive balances. When sash are prefit, or grooved after fitting, make groove $\frac{5}{8}$ " x $\frac{5}{8}$ ".

For sash glazed with single or double thick glass and not over 13/8" thick, type "C" balances of the proper size may be used for any sash opening shown on this chart.

Where sizes required end in 35 above 2735 use next higher number as 2740 if sash are 13/4" thick. Where sizes required end in 40 above 3240 the use of 13/4" sash instead of 13/8" may run weights above 30 pounds per sash. Watch such sizes closely as to weight and order "M" type balances if over 30 pounds per sash.

Where sizes of sash are other than Western Stock openings, use balance numbers corresponding to glass size and specify type of opening such as Ohio, Boston, etc. Also give sash opening width and height.

Where sash are odd sizes, or have other than standard stiles and rails, such as Queen Ann or circle heads, give glass sizes of top and bottom sash, also overall sash opening size and overall height of bottom sash. If sash are other than square head send sketch showing spring line.

AL. NO.	SASH OPENING	GLASS SIZE	BAL. NO.	SASH OPENING	GLASS SIZE	
	WIDTH HBIGHT	WIDTH HEIGHT		WIDTH HEIGHT	WIDTH HBIGHT	
1025	1'2" to 4'4" x 2'2"	10" to 48" x 10"	2835	2' 11" to 3' 10" x 5' 2"	31" to 42" x 28"	
1125	1'2" to 4'4" x 2'4"	10" to 48" x 11"	2840	3' 11" to 4' 4" x 5' 2"	43" to 48" x 28"	
1225	1' 2" to 3' 10" x 2' 6"	10" to 42" x 12"	2925	1' 2" to 2' 0" x 5' 4"	10" to 20" x 29"	
1230	3' 11" to 4' 4" x 2' 6"	43" to 48" x 12"	2930	2'1" to 2'10" x 5'4"	21" to 30" x 29"	
1325	1' 2" to 3' 4" x 2' 8"	10" to 36" x 13"	2935	2'11" to 3'8" x 5'4"	31" to 40" x 29"	
1330	3' 5" to 4' 4" x 2' 8"	37" to 48" x 13"	2940	3' 9" to 4' 4" x 5' 4"	41" to 48" x 29"	
1425	1'2" to 3'4" x 2'10"	10" to 36" x 14"	3025	1' 2" to 1' 10" x 5' 6"	10" to 18" x 30"	
1430	3' 5" to 4' 4" x 2' 10"	37" to 48" x 14"	3030	1'11" to 2'6" x 5'6"	19" to 26" x 30"	
1525	1'2" to 3'0" x 3'0"	10" to 32" x 15"	3035	2' 7" to 3' 8" x 5' 6"	27" to 40" x 30"	
1530	3'1" to 4'4" x 3'0"	33" to 48" x 15"	3040	3'9" to 4'4" x 5'6"	41" to 48" x 30"	
1625	1' 2" to 3' 0" x 3' 2"	10" to 32" x 16"	3125	1' 2" to 1' 8" x 5' 8"	10" to 16" x 31"	
1630	3'1" to 4'4" x 3'2"	33" to 48" x 16"	3130	1'9" to 2'6" x 5'8"	17" to 26" x 31"	
1725	1'2" to 3'0" x 3'4"	10" to 32" x 17"	3135	2' 7" to 3' 6" x 5' 8"	27" to 38" x 31"	
1730	3'1" to 4'4" x 3'4"	33" to 48" x 17"	3140	3' 7" to 4' 4" x 5' 8"	39" to 48" x 31"	4
1825	1'2" to 3'0" x 3'6"	10" to 32" x 18"	3225	1'2" to 1'6" x 5'10"	10" to 14" x 32"	
1830	3'1" to 3'10" x 3'6"	33" to 42" x 18"	3230	1'7" to 2'4" x 5'10"	15" to 24" x 32"	each
1835	3' 11" to 4' 4" x 3' 6"	43" to 48" x 18"	3235	2' 5" to 3' 4" x 5' 10"	25" to 36" x 32"	0
1925	1'2" to 2'8" x 3'8"	10" to 28" x 19"	3240	3' 5" to 4' 4" x 5' 10"	37" to 48" x 32"	
1930	2'9" to 3'6" x 3'8"	29" to 38" x 19"	3325	1'2" to 1'8" x 6'0"	10" to 16" x 33"	for
1935	3'7" to 4'4" x 3'8"	39" to 48" x 19"	3330	1'9" to 2'4" x 6'0"	17" to 24" x 33"	4
2025	1'2" to 2'8" x 3'10"	10" to 28" x 20"	3335	2'5" to 3'8" x 6'0"	25" to 40" x 33"	Ü,
2030	2'9" to 3'6" x 3'10"	29" to 38" x 20"	3340	3' 9" to 4' 4" x 6' 0"	41" to 48" x 33"	price
2035	3' 7" to 4' 4" x 3' 10"	39" to 48" x 20"	3425	1'2" to 1'6" x 6'2"	10" to 14" x 34"	+ -
2125	1' 2" to 2' 8" x 4' 0"	10" to 28" x 21"	3430	1'7" to 2'2" x 6'2"	15" to 22" x 34"	list 6" h
2130	2'9" to 3'6" x 4'0"	29" to 38" x 21"	3435	2'3" to 3'4" x 6'2"	23" to 36" x 34"	
2135	3' 7" to 4' 4" x 4' 0"	39" to 48" x 21"	3440	3' 5" to 4' 4" x 6' 2"	37" to 48" x 34"	base . K'
2225	1'2" to 2'6" x 4'2"	10" to 26" x 22"	3525	1'2" to 1'6" x 6'4"	10" to 14" x 35"	
2230	2'7" to 3'4" x 4'2"	27" to 36" x 22"	3530	1'7" to 2' 2" x 6' 4"	15" to 22" x 35"	40
2235	3'5" to 4'4" x 4'2"	37" to 48" x 22"	3535	2'3" to 3'2" x 6'4"	23" to 34" x 35"	-
2325	1' 2" to 2' 2" x 4' 4"	10" to 22" x 23"	3540	3'3" to 4'4" x 6'4"	35" to 48" x 35"	set
2330	2'3" to 3'4" x 4'4"	23" to 36" x 23"	3625	1'2" to 1'6" x 6'6"	10" to 14" x 36"	L "
2335	3'5" to 4'4" x 4'4"	37" to 48" x 23"	3630	1'7" to 2'4" x 6'6"	15" to 24" x 36"	per
2425	1' 2" to 2' 0" x 4' 6"	10" to 20" x 24"	3635	2'5" to 3'2" x 6'6"	25" to 34" x 36"	
2430	2'1" to 3'2" x 4'6"	21" to 34" x 24"	3640	3'3" to 4'4" x 6'6"	35" to 48" x 36"	14c
2435	3'3" to 4'4" x 4'6"	35" to 48" x 24"	3725	1'2" to 1'6" x 6'8"	10" to 14" x 37"	ppo
2525	1' 2" to 2' 2" x 4' 8"	10" to 22" x 25"	3730	1'7" to 2'4" x 6'8"	15" to 24" x 37"	0
2530	2'3" to 3'2" x 4'8"	23" to 34" x 25"	3735	2' 5" to 3' 2" x 6' 8"	25" to 34" x 37"	
2535	3'3" to 4'4" x 4'8"	35" to 48" x 25"	3740	3' 3" to 4' 4" x 6' 8"	35" to 48" x 37"	9
2625	1'2" to 2'0" x 4'10" 2'1" to 3'0" x 4'10"	10" to 20" x 26" 21" to 32" x 26"	3825	1'2" to 1'4" x 6'10"	10" to 12" x 38"	Si
2630	3'1" to 4'0" x 4'10"	33" to 44" x 26"	3830	1'5" to 2'0" x 6'10"	13" to 20" x 38"	•
2635		45" to 48" x 26"	3835	2'1" to 3'0" x 6'10"	21" to 32" x 38"	these sizes
2640 2725	4'1" to 4'4" x 4'10" 1'2" to 2'2" x 5'0"	10" to 22" x 27"	3840	3'1" to 4'4" x 6'10"	33" to 48" x 38"	=
	2' 3" to 3' 0" x 5' 0"	23" to 32" x 27"	3930	1' 2" to 2' 0" x 7' 0"	10" to 20" x 39"	0
2730 2735	3'1" to 3'10" x 5'0"	33" to 42" x 27"	3935	2'1" to 3'0" x 7'0"	21" to 32" x 39" 33" to 48" x 39"	-
2740	3'11" to 4'4" x 5'0"	43" to 48" x 27"	3940	3'1" to 4'4" x 7'0"	10" to 18" x 40"	
2825	1' 2" to 2' 0" x 5' 2"	10" to 20" x 28"	4030 4035	1' 2" to 1' 10" x 7' 2"	19" to 30" x 40"	
2830	2'1" to 2'10" x 5'2"	21" to 30" x 28"	4035	1'11" to 2'10" x 7'2"	31" to 48" x 40"	

SEE OTHER SIDE FOR "D" CHART